

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

C. Amendments to the Claims.

1. (Original) A method, comprising the steps of:

5 bending a substrate by applying a force with a movable chuck portion
to orient essentially all of a surface of the substrate at a predetermined angle
with respect to an input source.

2. (Original) The method of claim 1, wherein:

10 the substrate comprises a silicon wafer having a diameter of at least
about eight inches.

3. (Original) The method of claim 1, wherein:

 the force comprises an electrostatic force generated by a potential
difference between the substrate and the movable chuck portion.

15 4. (Original) The method of claim 1, wherein:

 the movable portion comprises a split electrode electrostatic chuck.

5. (Original) The method of claim 1, wherein:

20 bending the substrate includes receiving the substrate in a recess
having a concave shape.

6. (Original) The method of claim 5, wherein:

25 bending the substrate includes introducing a curvature into the
substrate selected from the group consisting of spherical, conical and
cylindrical.

7. (Original) The method of claim 1, wherein:

 applying the force with a movable chuck portion includes attracting the
substrate to the movable portion with an electrostatic force when the substrate has an

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

essentially unbent shape, and moving the movable chuck portion with respect to a stationary substrate receiving portion.

8. (Original) The method of claim 1, wherein:

5 applying the force with a movable chuck portion includes moving the movable chuck portion with respect to a stationary substrate receiving portion to bend the substrate.

9. (Original) The method of claim 8, further including:

10 attracting the substrate receiving portion to a curved stationary substrate receiving portion with an electrostatic force.

10. (Original) A method of processing a integrated circuit wafer, comprising the steps of:

 placing a wafer over a concave chuck portion;
15 applying a force to the wafer to conform to the concave chuck portion;
 maintaining the wafer in the deformed shaped as the wafer is processed with respect to an input source.

11. (Original) The method of claim 10, wherein:

20 placing the wafer over the concave portion includes attracting the wafer with an electrostatic force to the concave portion.

12. (Currently Amended) The method of claim ~~11~~12, wherein:

25 attracting the wafer includes applying a voltage to an electrostatic chuck within the concave portion.

13. (Original) The method of claim 10, wherein:

 placing the wafer over the concave portion includes orienting the wafer in a first direction; and
30 the force is applied with a movable chuck portion at an angle greater than 45° with respect to the first direction.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

14. (Original) The method of claim 13, wherein:

placing the wafer over the concave portion includes contacting a stationary
chuck portion with a first side of the wafer; and

5 the force is applied by a movable portion to a second side of the wafer that
is opposite to the first side.

15. (Original) The method of claim 13, wherein:

placing the wafer over the concave portion includes contacting a stationary
10 chuck portion with a first side of the wafer; and

the force applied by the movable portion is an electrostatic force that attracts
the first side of the wafer to the movable portion.

16. (Original) A system, comprising:

an input source for processing the substrate according to a predetermined
15 manufacturing step;

a chuck system having

a substrate receiving surface that receives the substrate in an
essentially non-deformed shape, and

a force applying portion that applies an attractive force between the
20 substrate and the chuck system that maintains the substrate in a deformed
shape.

17. (Original) The system of claim 16, wherein:

the input source comprises an ion implantation source.

18. (Original) The system of claim 16, wherein:

25 the substrate receiving surface has a type of curve selected from the group
consisting of spherical, conical, and cylindrical.

19. (Original) The system of claim 16, wherein:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

the force applying portion includes a movable portion that moves with respect to the substrate receiving surface to change the substrate from the non-deformed shape to the deformed shape.

20. (Original) The system of claim 19, wherein:

5 the force applied by the movable portion is selected from the group consisting of electrostatic force and mechanical force.

21. (New) The method of claim 1, wherein:

10 after bending the substrate, clamping the substrate to a recessed receiving portion to maintain the substrate in a bent state.

15